

Abstract of the Disclosure

The present invention is a hardening processing apparatus for heating a substrate coated with a coating solution to harden the coating film on the substrate, which includes a first processing chamber for mounting the substrate coated with the coating solution on a heating plate and heating the substrate to a predetermined temperature on a one-by-one basis; a first irradiation unit provided in the first processing chamber, for irradiating the substrate mounted on the heating plate with ultraviolet light; and a second processing chamber connected in a communicating manner to the first processing chamber, for mounting the substrate coated with the coating solution on a temperature adjusting plate and adjusting the substrate to a temperature lower than a processing temperature of hardening processing on a one-by-one basis, in which the substrate is heated by the heating plate while being irradiated with the ultraviolet light by the first irradiation unit so that the coating film on the substrate is hardened. Accordingly, it is possible to harden the coating film at a lower temperature than that in the case of no irradiation of ultraviolet light so as to prevent occurrence of adverse effects due to heat to devices.